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(FILE 'HOME' ENTERED AT 10:00:02 ON 22 SEP 2008)
FILE 'CA' ENTERED AT 10:00:09 ON 22 SEP 2008
L1 8069 S (MULTIDIMENSION? OR COUPL?(1A)COLUMN OR (MULTI OR MULTIPLE OR 2
      OR TWO)(1W)DIMENSION?)(5A)CHROMATOG?
L2 73 S L1 AND(GEL(1A)PERMEAT?(2A)(CHROMATOG? OR COLUMN) OR GPC OR HPGPC)
L3 660 S L1 AND((REVERS? PHASE OR RP)(3A)(HPLC OR CHROMATOG? OR COLUMN) OR
      RPLC OR RPHPLC)
L4 15 S L2 AND L3
L5 5 S L1 AND (TEE OR (MIX? OR COMBIN? OR INTERFAC?)(2A)(COIL OR T))
L6 16 S L1 AND (TEE OR (MIX? OR COMBIN?)(2A)(COIL OR T OR INTERFACE OR
      FLOW))
L7 1745 S L1 AND (GAS OR TLC OT THIN LAYER?)(2A)CHROMATOG?
L8 2936 S L1/TI,IT,ST
L9 718 S L1 AND L2-3
L10 460 S L8 AND L9
L11 5952 S L1 AND ((GAS OR TLC OR THIN LAYER? OR PAPER)(2A)CHROMATOG? OR
      ELECTROPHORES?)
L12 693 S L11 AND (LIQUID (1A)CHROMATOG? OR HPLC)
L13 508 S L9 NOT L11
L14 354 S L8 AND L13
L15 32 S L14 AND(EDIBLE OR OIL OR FOOD)
L16 31 S L14 AND PY<1991
L17 693 S L12 NOT L13
L18 508 S L9 AND L13
L19 151 S L9 AND L12
L20 78 S L8 AND L19
L21 3 S L20 AND(EDIBLE OR OIL OR FOOD)
L22 9 S L20 AND PY<1991
L23 82 S L4,L15-16,L21-22
L24 57 S L23 AND PY<2004
L25 74 S L5-6,L24
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=> d bib,ab 125 1-74

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L25 ANSWER 30 OF 74 CA COPYRIGHT 2008 ACS on STN
AN 113:207703 CA
OREF 113:35005a,35008a
TI Automated high-resolution two-dimensional liquid chromatographic system
for the rapid and sensitive separation of complex peptide mixtures
AU Matsuoka, Kunie; Taoka, Masato; Isobe, Toshiaki; Okuyama, Tsuneo; Kato,
Yoshio
CS Fac. Sci., Tokyo Metrop. Univ., Tokyo, 158, Japan
SO Journal of Chromatography (1990), 515, 313-20
AB An automated two-dimensional liq. chromatog. system for the rapid and
sensitive sepn. of complex peptide mixts. is presented. The method
presents an application of the column-switching technique, and performs
sequential anion-exchange and reversed-phase chromatog. under a program
directed by a computer-assisted controller. To facilitate rapid and
sensitive sepns., short anal. columns (3.5 cm in length) packed with
nonporous packing materials of small particles size (2.5 µm) were
selected for both dimensional sepns., and the dead vols. of the flow
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system were reduced to the min. With this system, complex peptide mixts. such as a crude peptide fraction prepd. from brain exts. were resolved into ~150 peaks within 80 min, with a detection limit of 10 ng. The method can be used for the systematic anal. of biol. active peptides and for the microscale sepn. of peptide fragments in the strategy of protein and gene sequence anal.

L25 ANSWER 36 OF 74 CA COPYRIGHT 2008 ACS on STN

AN 111:149754 CA

OREF 111:24897a,24900a

TI Automated 2-D peptide mapping: gel filtration and reversed-phase chromatography

AU Bhikhabhai, R.; Lindblom, H.; Kaellman, I.; Faegerstam, L.

CS Pharm. LKB Biotechnol., Uppsala, Swed.

SO American Laboratory (Shelton, CT, United States) (1989), 21(5), 76, 78-81

AB The combination of gel filtration and reversed-phase chromatog. (RPC) described for peptide mapping of cellobiohydrolase from *Trichoderma reesei* illustrates the improved resoln. that can be achieved by employing >1 sepn. mode for peptide fragments. Gel filtration indicates the mol. size range of the fragments, and RPC provides extremely good resoln. A common mobile phase avoids sample prepn. between the different chromatog. sepns. and allows for automated protocols to be easily developed. Automation, in turn, enhances the reproducibility of the sepns. The use of electrophoresis as a 3rd dimension can provide further information on the purity of the peptide peaks.

L25 ANSWER 62 OF 74 CA COPYRIGHT 2008 ACS on STN

AN 100:79367 CA

OREF 100:11915a,11918a

TI Coupled column chromatography using hydrophilic gel permeation column to clean up biological fluid

AU Shimizu, Takefumi; Kubo, Masanori; Nakagawa, Kazuyuki

CS Tokushima Res. Inst., Otsuka Pharm. Co. Ltd., Tokushima, 771-01, Japan

SO Yakugaku Zasshi (1983), 103(11), 1174-9

LA Japanese

AB A simplified-coupled column technique for the simultaneous detn. of cilostamide (I) [68550-75-4] and its metabolites in biol. fluid by high-performance liq. chromatog. (HPLC) was developed. The plasma and urine contg. the intact drug and its metabolites are injected into the HPLC system directly. The effluent from the primary exclusion column is passed continuously through a 4-port valve and discarded. When the elution of the biopolymers [monitored by the refractive index (RI) detector] is complete, the valve diverts the metabolites and intact drug concd. on the hydrophilic gel permeation column to the secondary column for sepn. Their sepn. is achieved by using a gradient elution to elute the sample from the secondary column and their detection is performed by a UV detector and a fluorescence detector. The detection limit is about 3 ng with the injection vol. used in this method and the coeff. of variation is less than 1% for retention time and less than 3% for the peak height.

L25 ANSWER 66 OF 74 CA COPYRIGHT 2008 ACS on STN

AN 97:130368 CA
OREF 97:21623a,21626a
TI Applications of on-line multidimensional chromatography to solvent-refined coal
AU Chen, T. M.; Apffel, J. A.; McNair, H. M.
CS Dep. Chem., Virginia Polytech. Inst. and State Univ., Blacksburg, VA, 24061, USA
SO Preprints of Papers - American Chemical Society, Division of Fuel Chemistry (1981), 26(2), 7-11
AB The polycyclic arom. hydrocarbon distributions in solvent-refined coal liqs. were best detd. by on-line liq. chromatog. coupled with liq. chromatog. with selective fluorescence detectors in series for selective identification of individual components. Other on-line techniques tested were liq. chromatog. (silica gel)-liq. chromatog. (reverse-phase) and liq. chromatog.-gas chromatog.

L25 ANSWER 72 OF 74 CA COPYRIGHT 2008 ACS on STN
AN 89:74257 CA
OREF 89:11419a,11422a
TI Coupled column chromatography employing exclusion and a reversed phase. A potential general approach to sequential analysis
AU Johnson, E. L.; Gloor, R.; Majors, Ronald E.
CS Varian Aerograph, Walnut Creek, CA, USA
SO Journal of Chromatography (1978), 149, 571-85
AB The application of on-line, coupled column chromatog. (CCC) using exclusion chromatog. on microparticles as the preliminary sepn. technique and reversed-phase chromatog. as the secondary technique is described. The potential universality of the CCC approach is illustrated by applications in 3 areas: additives in compounded rubber, the pesticide malathion [121-75-5] in vegetable matter and limonin [1180-71-8] in grapefruit peel. The advantages and limitations of the coupling technique are discussed. The use of a double-beam variable-wavelength spectrophotometric detector set at 215 nm as a "universal" detector for exclusion chromatog. with unstabilized THF as the mobile phase is considered.

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STN INTERNATIONAL LOGOFF AT 10:54:59 ON 22 SEP 2008